

# ***EXHIBIT B***



**BOARD OF TRUSTEES  
Bylaw, Policy, and Curriculum Committee Agenda Items**

**To:** Board of Trustees  
**From:** Office of the President  
**Date:** February 20, 2013

The following Bylaw, Policy, and Curriculum Committee items are recommended to the Ocean County College Board of Trustees for approval at its meeting on **Monday, February 25, 2013**:

- ◆ Recommend approval of the following items, as accepted by the College Senate at its meeting on February 6, 2013:
  - ◆ Revision to Personal Training Program Certificate of Proficiency (**Exhibit B-1**)
  - ◆ Revised Degree Programs
    - ◆ A.A.S. Degree in Computer Science/Information Technology (**Exhibit B-2**)
    - ◆ A.A.S. Degree in Visual Communications Technology – Computer Graphics Option (**Exhibit B-3**)
    - ◆ A.S. Degree in Computer Science (**Exhibit B-4**)
    - ◆ A.S. Degree in Computer Science – Information Technology Option (**Exhibit B-5**)
    - ◆ A.S. Degree in Computer Science – Information Systems Option (**Exhibit B-6**)
    - ◆ A.S. Degree in Computer Science – Game Development and Design Option (**Exhibit B-7**)
  - ◆ New Course – POLI 265, Comparative Politics and Government (**Exhibit B-8**)
  - ◆ Revised Courses
    - ◆ CSIT 115, Introduction to Computer Game Development (**Exhibit B-9**)
    - ◆ CSIT 123, Integrated Office Software (**Exhibit B-10**)

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- ◆ CSIT 126, Intermediate Spreadsheets and Database (**Exhibit B-11**)
  - ◆ CSIT 133, Web Development Fundamentals (**Exhibit B-12**)
  - ◆ CSIT 173, Game Programming with Open Graphic Library (**Exhibit B-13**)
  - ◆ CSIT 212, Systems Analysis (**Exhibit B-14**)
  - ◆ CSIT 213, Database Management (**Exhibit B-15**)
  - ◆ RELG 193, World Religions (**Exhibit B-16**)
- 
- ◆ Revised Policy #5152, Students, Academic Standards, Graduation (**Exhibit B-17**)

## ***EXHIBIT B-1***

## EXHIBIT B - 1

**PERSONAL TRAINING – Certificate of Proficiency – Effective  
Catalog Year 2009-2010 2013-2014**

The Personal Training certificate program prepares students for employment in the fitness industry. Students seeking employment will also become eligible to apply for National Council on Strength and Fitness Personal Training certification. Students may apply credits earned in the certificate program toward an associate degree.

ENGL 151 English I 3 cr.  
 BIOL 130 Anatomy and Physiology I 4 cr.  
 HEHP 110 or Applied Modern Health or  
     HEHP 225 Contemporary Health 2-3 cr.  
 PSYC 172 General Psychology 3 cr.  
***HEHP 188 Introduction to Nutrition 3 cr.***  
 HEHP 252 Nutrition for Fitness and Sport 3 cr.  
 HEHP 160 Community First Aid and Safety 3 cr.  
 HEHP 239 Strength and Conditioning Physiology 3 cr.  
 HEHP 228 Care and Prevention of Athletic Injuries 3 cr.  
 HEHP 266 Principles of Exercise Prescription 3 cr.  
 HEHP 267 Sports Management 3 cr.

TOTAL CREDITS: ~~30-31~~

***33-34***

## ***EXHIBIT B-2***

**EXHIBIT B - 2****COMPUTER SCIENCE/INFORMATION TECHNOLOGY - A.A.S. Degree Program –  
Effective Catalog Year 2011-2012 2014-2015**

This career program prepares students for entry-level positions in a multitude of computer-related jobs. Both computer scientists and information technologists need a balance of software and hardware applications with specific courses emphasizing effective problem solving. The software development process, (composing and coordinating component of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to prepare the student to meet the future needs of integration, design, deployment, and management of computing, resources and services. A graduate of the program will have a firm understanding of modern programming practices and related skills in computer information technology. The department recommends the following minimal criteria for prospective students in the Computer Science/Information Technology program:

1. High school diploma or equivalent
2. Cumulative high school grade point average of C or above
3. Ranked in top half of high school graduating class
4. No developmental studies requirement

**FIRST SEMESTER**

CSIT 165 Programming I 4 cr.

ENGL 151 English I 3 cr.

MATH 151 or A Survey of Mathematics or 3 cr.

MATH 171 or Finite Mathematics or

MATH 181 or higher Introduction to Probability

\_\_\_\_\_ Humanities Gen Ed Requirement 3 cr.

\_\_\_\_\_ Social Science Gen Ed Requirement 3 cr.

16 cr.

**SECOND SEMESTER**

CSIT 166 Programming II 4 cr.

CSIT 176 Computer Organization & Architecture 3 cr.

ENGL 152 English II 3 cr.

\_\_\_\_\_ Computer Science Electives\* 6 cr.

16 cr.

**THIRD SEMESTER**

\_\_\_\_\_ Computer Science Electives\* 6 cr.

\_\_\_\_\_ Lab Science Gen Ed Requirement 4 cr.

COMM 154 Fundamentals of Public Speaking 3 cr.

\_\_\_\_\_ Social Science or Humanities Gen Ed  
Requirement 3 cr.

16  
cr.

**EXHIBIT B - 2****FOURTH SEMESTER**

CSIT 213	Database Management	3 cr.
_____	Computer Science Electives*	6 cr.
_____	Business Studies Elective	3 cr.
_____	OCC Requirement: Any course from the	3 cr.
	List of Approved General Education	
	Courses or ACAD 155 or any HEHP	
_____	Course	
_____	Elective (to meet required 64 cr.)	1 cr.
		16 cr.

**TOTAL CREDITS**  
64

Note: cr. (credit) = semester credit hour

Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.

\*Any CSIT course (CSIT 115 or higher) including those recommended in the areas of interest below. Students are not required to select a specific area of interest to complete this degree.

**SUGGESTED COMPUTER SCIENCE ELECTIVES**

CSIT 115	Introduction to Computer Game Development	3 cr.
CSIT 123	Integrated Office Software	3 cr.
CSIT 126	Intermediate Spreadsheets and Database	3 cr.
CSIT 130	Web Site Design	3 cr.
CSIT 131	Multimedia for the Web	3 cr.
CSIT 133	Web Development Fundamentals	3 cr.
CSIT 144	UNIX	3 cr.
<del>CSIT 160</del>	<del>Introduction to Visual Basic</del>	<del>3 cr.</del>
<del>CSIT 161</del>	<del>Advanced Visual Basic</del>	<del>3 cr.</del>
CSIT 173	Game Programming with OpenGL	3 cr.
<del>CSIT 174</del>	<del>Computer Systems</del>	<del>3 cr.</del>
CSIT 184	Networking Essentials	3 cr.
CSIT 212	Systems Analysis	3 cr.
CSIT 231	Dynamic Flash and Scripting Programming	3 cr.
	Elements for Web Pages	
CSIT 232	Server Programming for the Web	3 cr.
<del>CSIT 260</del>	<del>Application Programming in C++</del>	<del>3 cr.</del>
CSIT 265	Data Structures Analysis	4 cr.
<del>CSIT 281</del>	<del>Network Management</del>	<del>3 cr.</del>



## EXHIBIT B - 2

### **SUGGESTED BUSINESS STUDIES ELECTIVES**

ACCT 161 Principles of Accounting 3 cr.  
BUSN 131 Introduction to Business Administration 3 cr.  
BUSN 134 Principles of Marketing 3 cr.

Board of Trustees Approval Date: May 29, 2007  
Board of Trustees Approval Date: November 5, 2007  
Board of Trustees Approval Date: March 7, 2008  
Board of Trustees Approval Date: December 1, 2008  
Board of Trustees Approval Date: December 6, 2010  
Board of Trustees Approval Date: February 28, 2011

## ***EXHIBIT B-3***



TOTAL CREDITS 65 **EXHIBIT B - 3**

Note: cr. (credit) = semester credit hour

Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.

\*Pre-requisite BUSN 134 not required for students enrolled in this program.

\*\* Any course from subjects ARTS, DANC, MUSC, or THTR.

Board of Trustees Approval Date: May 29, 2007

Board of Trustees Approval Date: December 1, 2008

Board of Trustees Approval Date: May 24, 2010

Board of Trustees Approval Date: December 6, 2010

## ***EXHIBIT B-4***

**EXHIBIT B - 4****COMPUTER SCIENCE - A.S. Degree Program – Effective Catalog Year 2012-2013 2014-2015**

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of ~~Arts~~ **Science** degree in computer science. The curriculum follows the model provided by the Association of Computing Machinery and the Institute of Electrical and Electronics Engineers, Inc. Computer Society in order to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. Effective problem solving is central to good programming; this curriculum provides the necessary foundation. The software development process (composing and coordinating components of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to address these needs in preparing the student for a future in computer science. The department recommends the following minimal criteria for prospective students in the Computer Science A.S. program:

1. High school diploma or equivalent
2. Cumulative high school grade point average of C or above
3. Ranked in top half of high school graduating class
4. No developmental studies requirement

**FIRST SEMESTER**

CSIT 165 Programming I 4 cr.

MATH 265 Calculus I 4 cr.

ENGL 151 English I 3 cr.

\_\_\_\_\_ Social Science Gen Ed Requirement 3 cr.

\_\_\_\_\_ Humanities Gen Ed Requirement 3 cr.

17 cr.

**SECOND SEMESTER**

CSIT 166 Programming II 4 cr.

CSIT 176 Computer Organization &amp; Architecture 3 cr.

MATH 266 Calculus II 4 cr.

ENGL 152 English II 3 cr.

\_\_\_\_\_ Social Science Gen Ed Requirement 3 cr.

17 cr.

**THIRD SEMESTER**

CSIT 265 Data Structures and Analysis 4 cr.

MATH 267 Calculus III 4 cr.

PHYS 281 General Physics I 4 cr.

\_\_\_\_\_ Humanities Gen Ed Requirement 3 cr.

15 cr.

**FOURTH SEMESTER**

**EXHIBIT B - 4**

\_\_\_\_\_ Computer Science Elective (CSIT 126 or higher) 3 cr.  
 MATH 270 Discrete Mathematics 3 cr.  
 PHYS 282 General Physics II 4 cr.  
 \_\_\_\_\_ Elective 2 cr.  
 \_\_\_\_\_ OCC Requirement: Any course from the 3 cr.  
 List of Approved General Education  
 Courses or ACAD 155 or any HEHP  
 Course

15 cr.

TOTAL

CREDITS: 64

Note: cr. (credit) = semester credit hour  
 Courses satisfying general education requirements must be selected from the list  
 of Approved General Education Courses.  
 Kean-Ocean students need COMM 154 as a general elective

Board of Trustees Approval Date: September 24, 2007  
 Board of Trustees Approval Date: December 1, 2008  
 Board of Trustees Approval Date: February 28, 2011

## ***EXHIBIT B-5***



**EXHIBIT B - 5****COMPUTER SCIENCE - A.S. Degree Program – Information Technology  
Option – Effective Catalog Year 2012-2013 2014-2015**

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of ~~Arts~~ **Science** degree in computer information systems. The curriculum follows the model provided by the Association of Computing Machinery and the Institute of Electrical and Electronics Engineers Computer Society in order to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. The field of information technology is interdisciplinary, with applications to all aspects of the economy. Information technologists need a balance of software and hardware applications with concentration in specific courses. Effective problem solving is central to this degree; this curriculum provides the necessary foundation. The software development process (composing and coordinating components of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to prepare the student to meet the future needs of integration, design, deployment and management of computing, resources and services. The department recommends the following minimal criteria for prospective students in the Information Technology option:

1. High school diploma or equivalent,
2. Cumulative high school grade point average of C or above,
3. Ranked in top half of high school graduating class,
4. No developmental studies requirement

**FIRST SEMESTER**

CSIT 165 Programming I 4 cr.

ENGL 151 English I 3 cr.

\_\_\_\_\_ Social Science Gen Ed Requirement 3 cr.

\_\_\_\_\_ OCC Requirement: Any course from the 3 cr.  
List of Approved General Education  
Courses or ACAD 155 or any HEHP  
Course

\_\_\_\_\_ Humanities Gen Ed Requirement 3 cr.

16 cr.

**SECOND SEMESTER**

CSIT 166 Programming II 4 cr.

CSIT 176 Computer Organization &amp; Architecture 3 cr.

MATH 265 Calculus I 4 cr.

ENGL 152 English II 3 cr.

\_\_\_\_\_ Social Science Gen Ed Requirement 3 cr.

17 cr.

**THIRD SEMESTER**

CSIT 265 Data Structures and Algorithm Analysis 4 cr.

MATH 266 Calculus II 4 cr.

BIOL 161, CHEM 181 or Lab Science Gen Ed Requirement 4 cr.

PHYS 281

\_\_\_\_\_ Humanities Gen Ed Requirement 3 cr.

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15 cr.

### FOURTH SEMESTER

CSIT 213 Database Management 3 cr.

\_\_\_\_\_ Elective (to meet required 64 cr.)\* 9 cr.

BIOL 162, CHEM 182 or Lab Science Gen Ed (continue original science sequence) 4 cr.

PHYS 282

16 cr.

TOTAL

CREDITS 64

\* Students should select electives relevant to the Bachelor's Degree concentration

Kean-Ocean students need COMM 154 and MATH 270 as general electives

Note: cr. (credit) = semester credit hour

Courses satisfying general education requirements must be selected from the list of  
Approved General Education Courses.

Board of Trustees Approval Date: May 4, 2004

Board of Trustees Approval Date: September 24, 2007

Board of Trustees Approval Date: December 1, 2008

Board of Trustees Approval Date: February 28, 2011

## ***EXHIBIT B-6***

**EXHIBIT B - 6****COMPUTER SCIENCE - A.S. Degree Program - Information Systems Option -  
Effective Catalog Year ~~2012-2013~~ 2014-2015**

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of Arts ~~Science~~ degree in computer information systems. The curriculum follows the model provided by the Association of Computing Machinery, Computing Machinery, the Institute of Electrical and Electronics Engineers Computer Society and the Association for Information Systems professional society in order to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. Effective problem solving is central to good development of applications of computer and communications technology; this curriculum provides the necessary foundation. The software development process (composing and coordinating components of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to address these needs in preparing the student for a future in computer applications oriented fields that combine computing, developing applications and understanding how people, organizations, and society use them. The department recommends the following minimal criteria for prospective students in the Information Systems option:

1. High school diploma or equivalent,
2. Cumulative high school grade point average of C or above,
3. Ranked in top half of high school graduating class,
4. No developmental studies requirement

**FIRST SEMESTER**

CSIT 165 Programming I 4 cr.

MATH 265 Calculus I 4 cr.

ENGL 151 English I 3 cr.

\_\_\_\_\_ Social Science Gen Ed Requirement 3 cr.

\_\_\_\_\_ Humanities Gen Ed Requirement 3 cr.

17 cr.

**SECOND SEMESTER**

CSIT 166 Programming II 4 cr.

CSIT 176 Computer Organization & Architecture 3 cr.

MATH 266 Calculus II 4 cr.

ENGL 152 English II 3 cr.

\_\_\_\_\_ Social Science Gen Ed Requirement 3 cr.

17 cr.

**THIRD SEMESTER**

CSIT 265 Data Structures and Analysis 4 cr.

MATH 267 Calculus III 4 cr.

BIOL 161, or Lab Science Gen Ed Requirement 4 cr.

CHEM 181 or

PHYS 281

\_\_\_\_\_ Humanities Gen Ed Requirement 3 cr.

15 cr.

**FOURTH SEMESTER**

CSIT 213 Database Management 3 cr.

MATH 270 Discrete Mathematics 3 cr.

BIOL 162 or Lab Science Gen Ed Requirement 4 cr.

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CHEM 182 or (continue original science sequence)  
 PHYS 282

\_\_\_\_\_ OCC Requirement: Any course from the \_\_\_\_\_ 3 cr.  
 List of Approved General Education  
 Courses or ACAD 155 or any HEHP

\_\_\_\_\_ **Elective** 2 cr.

15 cr.

TOTAL CREDITS

64

Note: cr. (credit) = semester credit hour  
 Kean-Ocean students need COMM 154 as a general elective  
 Courses satisfying general education requirements must be selected from the list of  
 Approved General Education Courses.

Board of Trustees Approval Date: May 4, 2004  
 Board of Trustees Approval Date: September 24, 2007  
 Board of Trustees Approval Date: December 1, 2008  
 Board of Trustees Approval Date: February 28, 2011

## ***EXHIBIT B-7***

**EXHIBIT B - 7**

**COMPUTER SCIENCE - A.S. Degree Program – Game Development and Design**  
**Option -**  
**Effective Catalog Year ~~2012-2013~~ 2014-2015**

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of Arts **Science** degree in computer game design. The curriculum follows the model provided by the Association of Computing Machinery and the Institute of Electrical and Electronics Engineers Computer Society to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. Effective problem solving is central to good game design and development. The software development process (composing and coordinating components of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to prepare the student to work as a team and solve complex computer programming problems. The department recommends the following minimal criteria for prospective students in the Computer Game Development and Design option:

1. High school diploma or equivalent
2. Cumulative high school grade point average of C or above
3. Ranked in top half of high school graduating class
4. No developmental studies requirement

**FIRST SEMESTER**

CSIT 165 Programming I 4 cr.

ENGL 151 English I 3 cr.

\_\_\_\_\_ Humanities Gen Ed Requirement 3 cr.

\_\_\_\_\_ Social Science Gen Ed Requirement 3 cr.

CSIT 115 Introduction To Computer Game Development 3 cr.

16

cr.

**SECOND SEMESTER**

CSIT 166 Programming II 4 cr.

CSIT 176 Computer Organization & Architecture 3 cr.

ENGL 152 English II 3 cr.

\_\_\_\_\_ Humanities Gen Ed Requirement 3 cr.

\_\_\_\_\_ Social Science Gen Ed Requirement 3 cr.

16 cr.

**THIRD SEMESTER**

CSIT 265 Data Structures and Analysis 4 cr.

MATH 265 Calculus I 4 cr.

BIOL 161, or Lab Science Gen Ed Requirement 4 cr.

CHEM 181 or

PHYS 281

BUSN 134 or Principles of Marketing or

BUSN 271 Principles of Management 3 cr.

15

cr.

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## FOURTH SEMESTER

CSIT 213 Database Management 3 cr.

CSIT 173 Game Programming with Open GL 3 cr.

\_\_\_\_\_ OCC Requirement: Any course from the 3 cr.

List of Approved General Education  
Courses or ACAD 155 or any HEHP  
Course

BIOL 162, or Lab Science Gen Ed Requirement

CHEM 182 or (continue original science sequence) 4 cr.

PHYS 282

MATH 266 Calculus II 4 cr.

17 cr.

TOTAL  
CREDITS 64

Note: cr. (credit) = semester credit hour

Courses satisfying general education requirements must be selected from the list of  
Approved General Education Courses.

Board of Trustees Approval Date: August 28, 2006

Board of Trustees Approval Date: September 24, 2007

Board of Trustees Approval Date: December 1, 2008

Board of Trustees Approval Date: February 28, 2011



## ***EXHIBIT B-8***

## EXHIBIT B - 8

**OCEAN COUNTY COLLEGE  
NEW COURSE PROPOSAL - OFFICIAL COURSE DESCRIPTION  
SCHOOL OF SOCIAL SCIENCE AND HUMAN SERVICES**

1. COURSE NUMBER AND TITLE: POLI 265: Comparative Politics and Government

2. SEMESTER HOURS: 3 CONTACT HOURS: (3 + 0)  
lecture lab

3. CATALOG DESCRIPTION:

This course will expose students to various concepts and theories of comparative politics through the examination of the structures, institutions, processes and historical contexts in which they occur. An emphasis will be placed on the impact that various cultural aspects such as religion and ethnicity have on contemporary societies and politics. Students will understand the difference between industrialized democracies, current and former communist regimes, and less developed nations by analyzing politics in various case studies such as the United Kingdom, China, France, South Africa and Iran.

4. PREREQUISITES: None COREQUISITES: None

5. MAXIMUM CLASS SIZE: 35 COURSE FEE CODE: 0  
DIFFERENTIAL FUNDING CATEGORY: A

COURSE TYPE FOR PERKINS REPORTING:

☐ vocational (approved for Perkins funding)  
☒ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

a. Describe the need for this course

There is a growing need for a course on comparative politics. Students need the knowledge and the tools whereby they can effectively communicate in a global economy. Comparative Politics is a core requirement for most four year political science programs and will provide our students with a well rounded perspective of global systems. Students will be able to highlight

## EXHIBIT B - 8

the core differences and similarities between the presidential democracy that exists in the United States and systems that exist abroad.

b. Relationship to courses within the College

- i. Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course which satisfies a general education requirement?

☒ yes ☐ no

If yes, mark with an "x" the appropriate category below.

☐ Communication ☒ Social Science ☐  
History ☐ Humanities ☐ Lab Science ☐ Science  
(Non-Lab) ☐ Mathematics ☐ Technology ☒ Diversity  
☐ Information Literacy ☐ Ethical  
Reasoning/Action

- ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

☐ Program-specific requirement for the following degree program(s):

☐ Elective

c. Related courses in other institutions

[Note: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of obsolete courses which may be reactivated.]

- i. List any comparable course(s) at other community colleges by completing the table below. Insert "None" if there are no comparable courses.

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Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	C
Brookdale C.C.	Comparative Politics	Pol 227	3	
Burlington C.C.	Comparative Government and Politics	Pol 103	3	

ii. If "None" was inserted, please explain.

iii. Complete the table below. The four-year institutions listed below comprise the top six institutions queried on the NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	U I "U"
Georgian Court University	Elective Credit			
Kean University	PS 2300 Intro to Comparative Pol. 3 Credits	Social Sciences Gened		
Monmouth University	PS261 Comparative European Govts 3 Credits			
Richard Stockton College	POLS2160 (INTRODUCTION TO COMPARATIVE PO) 3 Credits	International/Multicultural Course, Social and Behavioral Sciences		
Rowan University	POSC07230 (COMP POLITICAL SYS) 3 Credits	General Education Course, Multicultural/Global, Social and Behavioral Sciences		
Rutgers – New Brunswick	01790103 (COMPARATIVE POLITICS) 3 credits	Historical Analysis, Social Analysis		

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- iv. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four year institution, or (b) an e-mail from the contact person (attach to this proposal).
- v. If not transferable to any institution, explain.
- d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College.

Comparative Politics satisfies the Academic Master Plan's expectations of creating "Intentional Learners" by focusing on skills which promote an individual's preparedness to communicate, relate, and work in a world that increasingly relies on collaboration with other cultures. It also fosters an understanding of other countries' economic, social and political environment in which each governmental system is embedded, thus helping students to make sound political comparisons and ethical decisions.

- e. Mark with an "x" the General Education goal(s) addressed by this course:

<input checked="" type="checkbox"/> 1. Communication – Written and Oral	<input type="checkbox"/> 6. Humanistic Perspective
<input type="checkbox"/> 2. Quantitative Knowledge and Skills	<input checked="" type="checkbox"/> 7. Historical Perspective
<input type="checkbox"/> 3. Scientific Knowledge and Reasoning	<input checked="" type="checkbox"/> 8. Global and Cultural Awareness
<input type="checkbox"/> 4. Technological Competency/Info Literacy	<input type="checkbox"/> 9. Ethical Reasoning and Action
<input checked="" type="checkbox"/> 5. Society and Human Behavior	<input checked="" type="checkbox"/> 10. Independent/Critical Thinking

## 7. SPECIFIC COURSE LEARNING OBJECTIVES

Students who complete this course will be able to:

- a. Acquire a basic understanding of the field of comparative politics and its key concepts, approaches, components and theories.
- b. Define the state, its origins and the rise of the modern state.

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- c. Identify and understand the distinct features of various political systems.
- d. Analyze and explain the global impact of communism.
- e. Identify the distinct similarities and differences that exist when analyzing selected case studies of democratic and authoritarian governments
- f. Compare and contrast different political economies. Identify the main causes for differing levels of economic development and stability.

## 8. Methods of Instruction:

- Lectures and computer assisted instruction using video presentation and student response
- It will also require the use of computer/internet research as an integral part of the course as both a learning and communications vehicle.
- Directed discussion
- Small group discussion and resolution of problems
- Collective practical application of learned material through writing individually

## 9. Instructional Materials

An appropriate textbook will be selected. Please contact the department for current adoptions.

## 10. TENTATIVE TOPICAL OUTLINE:

- a. Introduction / What is Comparative Politics?
- b. Defining a State
- c. Ethnic Identity, National Identity and Citizenship
- d. The Components of Political Economy
- e. Democratic Regimes
- f. Non-Democratic Regimes
- g. Political Violence
- h. Advanced Democracies
- i. Communism and Post Communism
- j. Less-Developed and Newly Industrializing Countries
- k. Globalization and the Future of Comparative Politics

**EXHIBIT B - 8****11. GRADE DETERMINANTS**

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

A Excellent      C Average    I Incomplete  
 B+ Very Good    D Below Average    W Withdrawn  
 B Good    F Failure    R Audit  
 C+ Above Average    P Passing    NC No Credit

**12. NUMBER OF PAPERS AND EXAMINATIONS**

A minimum of three major examinations and one major written assignment will be required.

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

In order to maintain a central file of current course documents on Ocean Cruiser, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

<b>Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.</b>	<b>Revisions to the following items must be sent "For Information Only" to the Curriculum Committee, College Senate, and Board of Trustees.</b>
#1 Course Number & Title	#5 Maximum Class Size / Course Fee Code / Differential Funding Category
#2 Semester Hours/Contact Hours	#8 Methods of Instruction
#3 Catalog Description	#9 Instructional Materials
#4 Prerequisites & Corequisites	#10 Tentative Topical Outline

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#6 Justification	#11 Grade Determinants
#7 Course Objectives	#12 Number of Papers and Examinations



## ***EXHIBIT B-9***

OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT-115: Introduction to  
Computer

Game

Development

2. SEMESTER HOURS: 3 CONTACT HOURS: (3 + 0)

Lecture Lab

3. CATALOG DESCRIPTION:

This course is an overview of game development. Students will analyze games and gameplay elements, examine genres and trends in games and formulate their own proposal for an original game. The course will also discuss the history of videogames, the current state of electronic gaming, as well as possible future developments. ~~This course is a required course in the AS Computer Game Development and Design Option and an elective in the AAS degree.~~ Open lab time required.

4. PREREQUISITES: None COREQUISITES: None
5. MAXIMUM CLASS SIZE: 22 COURSE FEE CODE: 3  
DIFFERENTIAL FUNDING CATEGORY: B

COURSE TYPE FOR PERKINS REPORTING:

☒ vocational (approved for Perkins funding)  
☐ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

This is a required course in the Computer Science AS Degree: Game Development and Design Option.

- b. Relationship to courses within the College:

- i. Will the college submit this course to the statewide General Education Coordinating Committee for approval as a

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course which satisfies a general education requirement? \_\_\_\_  
 yes   x   no

If yes, mark with an "x" the appropriate category below.

\_\_\_\_ Communication \_\_\_\_ Social Science \_\_\_\_  
 History \_\_\_\_ Humanities \_\_\_\_ Lab Science \_\_\_\_ Science  
 (Non-Lab) \_\_\_\_ Mathematics \_\_\_\_ Technology \_\_\_\_ Diversity  
 \_\_\_\_ Information Literacy \_\_\_\_ Ethical  
 Reasoning/Action

ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

  x   Program-specific requirement for the following degree program(s):

AS in Computer Science / AAS in Computer  
 Science/Information Technology

\_\_\_\_ Elective

c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of an obsolete course which may be reactivated.]

i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comm

ii. If "None" was inserted, please explain.

## EXHIBIT B - 9

- iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rutgers – New Brunswick				
Georgian Court University				
Richard Stockton College				
Monmouth University				
Kean University				
Rowan University				

- iv. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four-year institution, or (b) an email from the contact person (attach to this proposal).
- v. If not transferable to any institution, explain.
- d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College.

This course addresses the College's vision, mission, and Academic Master Plan by

- i. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
- ii. Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)
- iii. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)
- iv. Seeking to empower students through the mastery of

## EXHIBIT B - 9

intellectual and Practical Skills. (Academic Master Plan)

v. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)

e. Mark with an "x" the General Education goal(s) addressed by this course:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> 1. Communication – Written and Oral       | <input type="checkbox"/> 6. Humanistic Perspective                    |
| <input type="checkbox"/> 2. Quantitative Knowledge and Skills                 | <input type="checkbox"/> 7. Historical Perspective                    |
| <input type="checkbox"/> 3. Scientific Knowledge and Reasoning                | <input type="checkbox"/> 8. Global and Cultural Awareness             |
| <input checked="" type="checkbox"/> 4. Technological Competency/Info Literacy | <input type="checkbox"/> 9. Ethical Reasoning and Action              |
| <input type="checkbox"/> 5. Society and Human Behavior                        | <input checked="" type="checkbox"/> 10. Independent/Critical Thinking |

#### 7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

- a. Compare historical events/periods with types of games played in that time.
- b. Explain various recurring strategy elements common to all game play.
- c. Describe the various video game platforms.
- d. Recognize the basic types and genres of and classify games according to type and genre.
- e. Demonstrate a working knowledge of game history, identifying and relating the history of a game to its development.
- f. Explain and identify the concept of Game Theory.
- g. Critically evaluate a game based on historical importance, effectiveness of strategy, genre, and game theory.
- h. Explain games in the context of market factors (including the differences in the Japanese and European markets).

8. METHODS OF INSTRUCTION: Class lecture/discussion, demonstrations, current readings, computer interaction, assignments, and game project.

9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE

## EXHIBIT B - 9

## NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions.

Class notes, software, manuals and online help, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

## 10. TENTATIVE TOPICAL OUTLINE:

- A) Introduction
  - 1) Introduction to gaming
  - 2) Origins and Evolution of Gaming
  - 3) Gaming Genres (strategy, adventure, simulation, action, role-playing, sports, and war games)
- B) Game Research: What, Why, Where, How?
  - 1) Introduction to Video Games
  - 2) Video Game Platforms
  - 3) Video Game Genres
  - 4) Writing with Games: The Quest for Interactive Storytelling
  - 5) Games as a Medium I: Entertainment and Communication
  - 6) Games as a Medium II: Game Play vs. Narrative
  - 7) Technology: Shooters, Graphics, Game Engines, Machinima
  - 8) Military Gaming and Simulation
  - 9) Culture: Gender, Player Communities, Violence and Subversion of Mainstream Games
  - 10) Case Study
- C) Overview of Game Theory
  - 1) Introduction to Game Development
  - 2) Basic Elements of Game Production
  - 3) What is a Game Proposal?
- D) Writing about Games: Criticism, the Game Press and Reviews
  - 1) How to Analyze a Game
  - 2) Case Studies
- E) Process of Game Development

**EXHIBIT B - 9**

- 1) Developing a Game Concept - Brainstorming
- 2) Establishing the focus
- 3) Creating a Story Line
- 4) Determining the storytelling mode to make the gameplay work
- 5) Documenting the design
- 6) Playtesting
- F) The Business: Game Production
  - 1) Effect of Market Factors on Game Development
  - 2) Culture: The International Scene (Europe, Japan, Korea)
  - 3) Is your Concept Suitable?
  - 4) How to Identify a Market for Your Game
- G) Final Project

**11. GRADE DETERMINANTS:**

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

A Excellent C Average I Incomplete  
 B+ Very Good D Below Average W Withdrawn  
 B Good F Failure R Audit  
 C+ Above Average P Passing NC No Credit

**12. NUMBER OF PAPERS AND EXAMINATIONS:**

A minimum of three exams or skill assessments and a minimum of two major projects.

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

In order to maintain a central file of current course documents on Ocean Cruiser, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

## EXHIBIT B - 9

Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent "For Information Only" to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Maximum Class Size / Course Fee Code / Differential Funding Category
#2 Semester Hours/Contact Hours	#8 Methods of Instruction
#3 Catalog Description	#9 Instructional Materials
#4 Prerequisites & Corequisites	#10 Tentative Topical Outline
#6 Justification	#11 Grade Determinants
#7 Course Objectives	#12 Number of Papers and Examinations

Revised: December 1990; February 27, 1996; April 30, 1996; December 1998; May 4, 2004; Feb. 28, 2006; March 8, 2006  
Board of Trustees Approval Date: December 11, 2006  
Board of Trustees Approval Date: March 26, 2012  
PLT Approval of Form: May 22, 2012



## ***EXHIBIT B-10***

## EXHIBIT B - 10

OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT-123: Integrated Office Software
2. SEMESTER HOURS: 3 CONTACT HOURS: (3 + 0)

Lecture Lab

3. CATALOG DESCRIPTION:

This course is designed to teach the skills necessary to design, produce and integrate documents, worksheets, databases and professional presentations. The course will emphasize a hands-on project oriented approach to problem solving. The student will be using the ~~microcomputer~~ *a personal computer* in a Windows environment with a modern integrated office software package (Microsoft™ Office). ~~Students may not receive credit for both CSIT123 and CSIT125.~~ Working knowledge of Microsoft™ Windows suggested. Open lab time required.

4. PREREQUISITES: None COREQUISITES: None
5. MAXIMUM CLASS SIZE: 22 COURSE FEE CODE: 3  
DIFFERENTIAL FUNDING CATEGORY: B

COURSE TYPE FOR PERKINS REPORTING:

  x   vocational (approved for Perkins funding)  
      non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

This is a required course in all AS and AAS Business Degrees. This is an elective in the Computer Science/Information Technology AAS Degree.

- b. Relationship to courses within the College:

- i. Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course which satisfies a general education requirement?

## EXHIBIT B - 10

☒ yes ☐ no

If yes, mark with an "x" the appropriate category below.

☐ Communication ☐ Social Science ☐  
History  
☐ Humanities ☐ Lab Science ☐ Science  
(Non-Lab)  
☐ Mathematics ☒ Technology ☐ Diversity  
☐ Information Literacy ☐ Ethical  
Reasoning/Action

- ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

☐ Program-specific requirement for the following degree program(s):

☐ Elective

- c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of an obsolete course which may be reactivated.]

- i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comm

- ii. If "None" was inserted, please explain.  
iii. Complete the table below. The institutions listed

## EXHIBIT B - 10

comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rutgers – New Brunswick				
Georgian Court University				
Richard Stockton College				
Monmouth University				
Kean University				
Rowan University				

- iv. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four-year institution, or (b) an email from the contact person (attach to this proposal).
  - v. If not transferable to any institution, explain.
- d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

This course addresses the College's vision, mission, and Academic Master Plan by

- i. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
- ii. Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)
- iii. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)
- iv. Seeking to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)

- v. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)
- e. Mark with an "x" the General Education goal(s) addressed by this course:
 

<input checked="" type="checkbox"/> 1. Communication – Written and Oral	<input type="checkbox"/> 6. Humanistic Perspective
<input type="checkbox"/> 2. Quantitative Knowledge and Skills	<input type="checkbox"/> 7. Historical Perspective
<input type="checkbox"/> 3. Scientific Knowledge and Reasoning	<input type="checkbox"/> 8. Global and Cultural Awareness
<input checked="" type="checkbox"/> 4. Technological Competency/Info Literacy	<input type="checkbox"/> 9. Ethical Reasoning and Action
<input type="checkbox"/> 5. Society and Human Behavior	<input checked="" type="checkbox"/> 10. Independent/Critical Thinking

## 7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

- a. Describe and illustrate the hardware and software requirements for Integrated Office Software.
- b. Recognize and use various Windows features (menus, title bars, dialog boxes, cascading menus, dragging and dropping, pop-up menus, icons, taskbar and toolbars.)
- c. Use Windows to save and retrieve files, maintain directories and run Office Software.
- d. Describe file management, word processing, spreadsheet and charting concepts.
- e. Identify an application using database, graphics, word processing, spreadsheet and presentation software.
- f. Create and edit documents.
- g. Format documents with appropriate use of fonts and type styles to improve the appearance of a document.
- h. Import graphics and use tables in a document.
- i. Work with multiple documents transferring data between documents.
- j. Automate work by use of macros and templates.
- k. Produce a professional looking document project utilizing the word processing techniques presented.
- l. Create, edit and format a spreadsheet.
- m. Use functions in a spreadsheet.

- n. Work with multiple spreadsheets.
  - o. Use charts and graphs in a spreadsheet.
  - p. Produce a professional looking spreadsheet project utilizing the spreadsheet techniques presented.
  - q. Integrate the document and spreadsheet projects.
  - r. Create, maintain, and query a database management system.
  - s. Create and use database forms.
  - t. Create database reports.
  - u. Produce a database project utilizing the database techniques presented.
  - v. Create compound documents containing text, graphics, database, and spreadsheet data.
  - w. Manage shared data among applications.
  - x. Produce and present a professional slide show, utilizing graphs, clip art, charts and special features.
  - y. Integrate word processing, spreadsheets and database into a computer generated presentation application.
8. METHODS OF INSTRUCTION: Class lecture, discussion, demonstrations, labs and online presentations.
9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions.

Class notes, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

10. TENTATIVE TOPICAL OUTLINE:

- A) Introduction to Computers
  - 1) Components of a Computer
  - 2) Computer Software
  - 3) Application Software Packages
  - 4) Communications

## EXHIBIT B - 10

- 5) Networks
- 6) How to Purchase a Computer System
- 7) Maintenance
- B) Introduction to Windows
  - 1) Communication with Windows
  - 2) Using Windows
  - 3) File and Disk Concepts
  - 4) Using Windows Help
  - 5) Using Explorer
- C) Introduction to Integrated Office Software
  - 1) Office Family
  - 2) Microsoft Shortcut Bar
  - 3) Task Switching
  - 4) Modifying a Document File
  - 5) Printing
- D) Word Processing
  - 1) Creating and Editing a Document
    - a) Changing Fonts
    - b) Formatting a Document
    - c) Correcting Errors
    - d) *Using Templates*
  - 2) Formatting Documents
    - a) Paragraph Formatting
    - b) Working with multiple open documents
    - c) Using the Thesaurus
    - d) Using Spelling and Grammar Checkers
    - e) Find and Replace
  - 3) Improving Appearance of a Document
    - a) Adding Tables
    - b) ~~Adding Clip Art~~ Adding and Editing graphic objects
  - 4) ~~Automating Work~~ Creating Professional Documents
    - a) Using Mail Merge
    - b) *Using Reference Tools*
    - c) ~~Using Macros~~
    - d) Using Templates

## EXHIBIT B - 10

- 5) ~~Creating a Cover Letter~~
- 6) ~~Creating a Resume~~
- E) Spreadsheets
  - 1) Creating, Editing and Formatting a Worksheet
    - a) Autoformat
    - b) Custom Formats
  - 2) Using Formulas
    - a) Hierarchy
    - b) Autosum
  - 3) Using Functions
    - a) Statistical
    - b) Financial
    - c) *Logical*
    - d) *Math*
  - 4) Creating Charts and Graphs
    - a) Types of Charts
    - b) Modifying a Chart
  - 5) Working with Multiple Worksheets
- F) Object Linking and Embedding
  - 1) Integrating the Document with the Worksheet
- G) Database Processing
  - 1) Creating a Database
    - a) Fields
    - b) Keys
    - c) Wizards
    - d) Manual
  - 2) Maintaining a Database
    - a) Changing Views
    - b) Editing Tables
    - c) Entering and Editing Data
  - 3) Creating Forms
    - a) Wizards
    - b) Viewing Data
    - c) Editing Data
  - 4) Querying a Database



## EXHIBIT B - 10

- a) Sorting
  - b) Selection Criteria
  - c) *Using Functions*
- 5) Creating Reports
  - a) Wizards
  - b) Printing
- 6) Managing Shared Data among Applications
- H) Presentation Graphics
  - 1) Creating a Presentation
    - a) Creating a Title Slide
    - b) Changing Text Style and Fonts
    - c) Creating Remaining Slides
    - d) Moving between Slides
    - e) Viewing the Presentation in Slide Sorter View
    - f) Correcting Errors
    - g) Using Online Help
  - 2) Enhancing the Presentation
    - a) Adding ~~Clip Art~~ Graphical Objects to a Slide
    - b) Adding Text to an Object
    - c) Using Graphs and Tables
    - d) Adding Special Effects
    - e) Running an Automatic Slide *Show*
    - f) *Adding Sound to a Presentation*
- I) Integrating word processing, spreadsheets, database and presentation packages

## 11. GRADE DETERMINANTS:

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

A Excellent C Average I Incomplete  
 B+ Very Good D Below Average W Withdrawn  
 B Good F Failure R Audit  
 C+ Above Average P Passing NC No Credit

## EXHIBIT B - 10

## 12. NUMBER OF PAPERS AND EXAMINATIONS:

A minimum of 2 minor projects per application (Word, Excel, Access, PowerPoint and Integration), a minimum of 4 major projects, and a minimum of 4 exams and/or skills assessment

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

In order to maintain a central file of current course documents on Ocean Cruiser, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

<b>Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.</b>	<b>Revisions to the following items must be sent "For Information Only" to the Curriculum Committee, College Senate, and Board of Trustees.</b>
#1 Course Number & Title	#5 Maximum Class Size / Course Fee Code / Differential Funding Category
#2 Semester Hours/Contact Hours	#8 Methods of Instruction
#3 Catalog Description	#9 Instructional Materials
#4 Prerequisites & Corequisites	#10 Tentative Topical Outline
#6 Justification	#11 Grade Determinants
#7 Course Objectives	#12 Number of Papers and Examinations

Revised: December 1990; February 27, 1996; April 30, 1996; December 1998; May 4, 2004; Feb. 28, 2006; March 8, 2006

Board of Trustees Approval Date: December 11, 2006

Board of Trustees Approval Date: March 26, 2012

PLT Approval of Form: May 22, 2012

## ***EXHIBIT B-11***

## EXHIBIT B - 11

OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT-126: Intermediate Spreadsheets and Database
2. SEMESTER HOURS: 3 CONTACT HOURS: (3 + 0)

Lecture Lab

3. CATALOG DESCRIPTION:

This course expands on the introductory spreadsheet and database concepts presented in Integrated Office Software. Applications include the use of personal computers and integrated software (Microsoft™ Excel, Access and Visual Basic) to solve contemporary non-discipline specific information processing problems. ~~Students may not receive credit for both CSIT-125 and CSIT-126.~~ Open lab time required.

4. PREREQUISITES: CSIT 123 ~~or Permission of the Instructor~~  
COREQUISITES: None
5. MAXIMUM CLASS SIZE: 22 COURSE FEE CODE: 3  
DIFFERENTIAL FUNDING CATEGORY: B

COURSE TYPE FOR PERKINS REPORTING:

☒ vocational (approved for Perkins funding)  
☐ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

This is a required course in AAS Business Accounting Option. This is an elective in the Computer Science/Information Technology AAS Degree.

- b. Relationship to courses within the College:
  - i. Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course which satisfies a general education requirement?  
☐ yes ☒ no

Reasoning/Action

- Elective

- i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comments

- <https://mail.ocean.edu/owa/WebReadyViewBody.aspx?t=att&id=RgAAAABXU4lRySliQ...> 2/6/2013

## EXHIBIT B - 11

- iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to De Status (Place "U" in box)
Rutgers – New Brunswick				
Georgian Court University				
Richard Stockton College				
Monmouth University				
Kean University				
Rowan University				

- iv. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four-year institution, or (b) an email from the contact person (attach to this proposal).
- v. If not transferable to any institution, explain.
- d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

This course addresses the College's vision, mission, and Academic Master Plan by

- Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
- Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)
- Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)
- Seeking to empower students through the mastery of

## EXHIBIT B - 11

intellectual and Practical Skills. (Academic Master Plan)

v. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)

e. Mark with an "x" the General Education goal(s) addressed by this course:

<input checked="" type="checkbox"/> 1. Communication – Written and Oral	<input type="checkbox"/> 6. Humanistic Perspective
<input type="checkbox"/> 2. Quantitative Knowledge and Skills	<input type="checkbox"/> 7. Historical Perspective
<input type="checkbox"/> 3. Scientific Knowledge and Reasoning	<input type="checkbox"/> 8. Global and Cultural Awareness
<input checked="" type="checkbox"/> 4. Technological Competency/Info Literacy	<input type="checkbox"/> 9. Ethical Reasoning and Action
<input type="checkbox"/> 5. Society and Human Behavior	<input checked="" type="checkbox"/> 10. Independent/Critical Thinking

## 7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

- a. Create spreadsheets utilizing and manipulating lists and pivot tables.
- b. Create spreadsheets that integrate with other Windows programs and the World Wide Web.
- c. Create spreadsheets utilizing data validation and decision making functions.
- d. Create spreadsheets utilizing table manipulation functions.
- e. Create spreadsheets utilizing menu command macros.
- f. Create spreadsheets utilizing information from multiple worksheets and workbooks.
- g. Create spreadsheets utilizing data tables to perform what-if analysis and the scenario manager to create summary reports.
- h. Create spreadsheets utilizing goal seek and solver to determine best solutions.
- i. Create spreadsheets utilizing database functions.
- j. Enhance spreadsheets with customized menus, toolbars and interactive macros.
- k. Create databases utilizing input masks, data validation criteria and lookup tables to validate user input.
- l. Create databases utilizing pattern matching, list matching and parameter in selection queries.
- m. Create databases utilizing action queries and self joins.

## EXHIBIT B - 11

- n. Customize database forms.
  - o. Customize databases reports to add calculated and conditional fields, group totals and embedded and linked objects.
  - p. Customize the database to provide web-enabled information.
  - q. Customize the database application by utilizing macros, command buttons, dialog boxes, list boxes, GUI, function and event procedures.
8. METHODS OF INSTRUCTION: Class lecture/discussion, demonstrations, labs and student projects.
9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions.

Class notes, textbooks, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

10. TENTATIVE TOPICAL OUTLINE:

- A) Spreadsheets (Microsoft Excel)
  - 1) Review
    - a) Cell address
    - b) Formulas
    - c) Functions
    - d) Formatting
    - e) Charting
  - 2) Lists
    - a) Sorting and Searching
    - b) Maintaining
    - c) Summarizing
  - 3) Integration
    - a) Linking and Embedding
    - b) World Wide Web
  - 4) Programming



## EXHIBIT B - 11

- a) Data Validation
- b) Decision Making Functions
- c) Financial Functions
- d) Macros
- e) Summarizing Data From Multiple Worksheets
- f) Lookup Tables and Functions
- 5) Problem Solving
  - a) Data Tables
  - b) What-if Analysis – Scenario Manager
  - c) Best Solution - Solver
- 6) Database
  - a) Importing Data
  - b) Queries
  - c) Web Queries
- 7) Application Development
  - a) Interactive Macros
  - b) Customized Toolbars and Menus
  - c) ~~Introduction to Visual Basic~~
- B) Database (Microsoft Access)
  - 1) Review
    - a) Fields,
    - b) Indexing
    - c) Relationships (1 to 1, 1 to many)
    - d) Forms
    - e) Reports
  - 2) Field Properties
    - a) Input Masks
    - b) Format
    - c) Validation Rules
    - d) Table Lookup
  - 3) Selection Queries
    - a) Multiple Selection Queries
    - b) Pattern Matching
    - c) List of Values Matching
    - d) Parameters
  - 4) Customized Forms
    - a) Format Properties
    - b) Forms and Subforms

## EXHIBIT B - 11

- c) Filtering
- 5) Customized Reports
  - a) Calculated and Conditional Fields
  - b) Groups and Aggregate Functions
  - c) Embedded and Linked Objects
- 6) Integration
  - a) Exporting to Excel
  - b) Creating Web-Enabled Information
- 7) Additional Queries
  - a) Crosstab Queries
  - b) Action Queries
  - c) Self-Join Queries
  - d) SQL
  - e) *Using Functions*
- 8) User Interface
  - a) Macros
  - b) Command Buttons, Dialog and List Boxes
  - c) GUI
  - d) Functions and Event Procedures

## 11. GRADE DETERMINANTS:

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

A Excellent C Average I Incomplete  
 B+ Very Good D Below Average W Withdrawn  
 B Good F Failure R Audit  
 C+ Above Average P Passing NC No Credit

## 12. NUMBER OF PAPERS AND EXAMINATIONS:

A minimum of 2 minor projects per application (Excel and Access), a minimum of 4 major projects, and a minimum of 2 exams and/or skills assessment

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

## EXHIBIT B - 11

In order to maintain a central file of current course documents on Ocean Cruiser, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

<b>Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.</b>	<b>Revisions to the following items must be sent "For Information Only" to the Curriculum Committee, College Senate, and Board of Trustees.</b>
#1 Course Number & Title	#5 Maximum Class Size / Course Fee Code / Differential Funding Category
#2 Semester Hours/Contact Hours	#8 Methods of Instruction
#3 Catalog Description	#9 Instructional Materials
#4 Prerequisites & Corequisites	#10 Tentative Topical Outline
#6 Justification	#11 Grade Determinants
#7 Course Objectives	#12 Number of Papers and Examinations

Revised: December 1990; February 27, 1996; April 30, 1996; December 1998; May 4, 2004; Feb. 28, 2006; March 8, 2006  
 Board of Trustees Approval Date: December 11, 2006  
 Board of Trustees Approval Date: March 26, 2012  
 PLT Approval of Form: May 22, 2012

## ***EXHIBIT B-12***

## EXHIBIT B - 12

OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT-133: Web Developer Fundamentals
2. SEMESTER HOURS: 3 CONTACT HOURS: (3 + 0)

Lecture Lab

3. CATALOG DESCRIPTION:

This course is designed to meet the needs of students who wish to enter the field of Internet Development. It will provide a rigorous treatment of Hypertext Markup Language (HTML) using the current XHTML standard. Cascading Style Sheets (CSS) will be covered including external as well as embedded Style. Both CSS1 and CSS2 will be discussed and used. A study of JavaScript will give the students an introduction to Dynamic HTML (DHTML), and form a foundation for more advanced study of DHTML and JavaScript. Students will complete hands on projects as part of the requirements for the course. ~~Students shall not receive credit for both CSIT120 and CSIT133.~~ Open lab time required.

4. PREREQUISITES: Working knowledge of Microsoft Windows -  
COREQUISITES: None
5. MAXIMUM CLASS SIZE: 22 COURSE FEE CODE: 3  
DIFFERENTIAL FUNDING CATEGORY: B

COURSE TYPE FOR PERKINS REPORTING:

☒ vocational (approved for Perkins funding)  
☐ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

This is a program specific elective in the Computer Science/Information Technology AAS degree.

- b. Relationship to courses within the College:
  - i. Will the college submit this course to the statewide General

## EXHIBIT B - 12

Education Coordinating Committee for approval as a course  
which satisfies a general education requirement? \_\_\_\_  
yes x no

If yes, mark with an "x" the appropriate category  
below.

\_\_\_\_ Communication \_\_\_\_ Social Science \_\_\_\_  
History \_\_\_\_ Humanities \_\_\_\_ Lab Science \_\_\_\_ Science  
(Non-Lab)  
\_\_\_\_ Mathematics \_\_\_\_ Technology \_\_\_\_ Diversity  
\_\_\_\_ Information Literacy \_\_\_\_ Ethical  
Reasoning/Action

- ii. If the course does not satisfy a general education  
requirement, which of the following does it satisfy:

x Program-specific requirement for the following degree  
program(s):

AS in Computer Science (including program  
options) and AAS in Computer  
Science/Information Technology

\_\_\_\_ Elective

- c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when  
submitting a new course proposal. They do not need to be  
completed for most course revisions, unless an Official  
Course Description is so old that the course's transferability  
needs to be reconsidered, as in the case of an obsolete  
course which may be reactivated.]

- i. List any comparable course(s) by completing the table  
below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comm

## EXHIBIT B - 12


- ii. If "None" was inserted, please explain.
- iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rutgers – New Brunswick				
Georgian Court University				
Richard Stockton College				
Monmouth University				
Kean University				
Rowan University				

- iv. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four-year institution, or (b) an email from the contact person (attach to this proposal).
  - v. If not transferable to any institution, explain.
- d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

This course addresses the College's vision, mission, and Academic Master Plan by

- i. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
- ii. Seeking to ensure that students will thrive in an increasingly

## EXHIBIT B - 12

diverse and complex world. (Vision Statement)

- iii. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)
- iv. Seeking to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)
- v. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)

- e. Mark with an "x" the General Education goal(s) addressed by this course:

☒ 1. Communication – Written and Oral    ☐ 6. Humanistic Perspective  
☐ 2. Quantitative Knowledge and Skills    ☐ 7. Historical Perspective  
☐ 3. Scientific Knowledge and Reasoning    ☐ 8. Global and Cultural Awareness  
☒ 4. Technological Competency/Info Literacy    ☐ 9. Ethical Reasoning and Action  
☐ 5. Society and Human Behavior    ☒ 10. Independent/Critical Thinking

#### 7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

- a. Develop a basic web page following XHTML standards
- b. Use XHTML tags and properties
- c. Use an XHTML, CSS, reference appropriately
- d. Add hypertext links to a web page
- e. Work with Fonts, Colors, and Graphics
- f. Design a web page with tables as a layout tool
- g. Use Frames to display Multiple Web Pages
- h. Create web page forms and process using external CGI script
- i. Learn how to use External Style Sheets
- j. ~~Learn to program with JavaScript~~
- k. Learn how to work with JavaScript Objects and Events
- l. Use multimedia elements on a web page

- 8. METHODS OF INSTRUCTION: Class lecture, discussion, demonstrations, online presentations, analysis and critique of current web sites, and student web site design assignments.



## EXHIBIT B - 12

9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS /  
HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS.  
NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions.

Class notes, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

10. TENTATIVE TOPICAL OUTLINE:

- A) Develop a basic web page
  - 1) Explore the structure of the World Wide Web (WWW)
  - 2) Learn the basic principles of Web documents
  - 3) Use HTML tags to
    - a) format text
    - b) format headings
    - c) format paragraphs
    - d) create ordered, unordered, and definition lists
    - e) insert graphic images into an HTML document
    - f) insert horizontal lines into an HTML document
- B) Add hypertext links to a web page
  - 1) Create hypertext links between elements within a web page
  - 2) Create hypertext links between web pages
  - 3) Create hypertext links to web pages on the Internet
  - 4) Create hypertext links to various Internet resources such as File Transfer Protocol (FTP) services and newsgroups
  - 5) Distinguish between and be able to use absolute and relative path names
- C) Work with Fonts, Colors, and Graphics
  - 1) Learn how HTML handles color to
    - a) create a color scheme for a web page
    - b) place background image on a web page
    - c) define colors for the pages and for special characters
  - 2) Work with font sizes, colors, and types

## EXHIBIT B - 12

- 3) Learn about different image file formats
- 4) Control the placement and appearance of images on a web page
- 5) Work with client-side image maps
- D) Design a web page with tables as a layout tool
  - 1) Create a text table
  - 2) Create table headers and captions
  - 3) Control the appearance of a table and table text
  - 4) Create table cells that span several rows or columns
  - 5) Use nested tables to enhance page design
  - 6) ~~Learn Internet Explorer (IE) table extensions for tables~~
- E) Use Frames to display Multiple Web Pages
  - 1) Create frames for a web site
  - 2) Control the appearance and placement of frames
  - 3) Control the behavior of hypertext links on a web page using frames
  - 4) Use reserved target names
  - 5) Create a page that is viewable by browsers that support frames and by browsers that do not support frames
  - 6) Modify the appearance of frame borders
  - 7) Create and implement floating frames
- F) Create web page forms
  - 1) Use Common Gateway Interface (CGI) scripts
  - 2) Understand the various parts of an online form
  - 3) Create form elements
  - 4) Create hidden fields
  - 5) Work with form attributes
  - 6) Send data from a form
    - a) to a CGI script
    - b) without using CGI script
- G) Use Cascading Style Sheets
  - 1) History and theory of CSS
  - 2) Create
    - a) inline styles
    - b) embedded styles

## EXHIBIT B - 12

- c) external style sheets
- 3) Use cascading style sheets to
  - a) format paragraphs, lists and headings
  - b) format hypertext links in their four conditions
  - c) define content with the class and id attributes
  - d) use <div> and <span> tags and create styles for them
  - e) use Cascading Style sheets to design page layout
- H) ~~Program with JavaScript~~
  - 1) ~~Features of JavaScript~~
  - 2) ~~Use JavaScript to~~
    - a) ~~send output to a web page~~
    - b) ~~work with variables and data~~
    - c) ~~work with expressions and operators~~
    - d) ~~create a JavaScript Function~~
    - e) ~~work with arrays and conditional statements~~
    - f) ~~learn about program loops~~
  - I) ~~Work with JavaScript Objects and Events~~
    - 1) ~~Form validation~~
    - 2) ~~Object-based nature of JavaScript~~
    - 3) ~~Work with objects, properties, methods, and events~~
    - 4) ~~Use JavaScript to control a form submission~~
  - J) ~~Use multimedia elements on a web page.~~
    - 1) ~~Work with external and embedded multimedia files~~
    - 2) ~~Learn about the principles of sound and video clips~~
    - 3) ~~Use the <applet> tag to add a java applet to a web page~~

## 11. GRADE DETERMINANTS:

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

A Excellent C Average I Incomplete  
 B+ Very Good D Below Average W Withdrawn  
 B Good F Failure R Audit  
 C+ Above Average P Passing NC No Credit

## EXHIBIT B - 12

## 12. NUMBER OF PAPERS AND EXAMINATIONS:

A minimum of 5 assignments demonstrating understanding XHTML techniques and coding, and a minimum of 4 major works consisting of projects and/or tests.

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

In order to maintain a central file of current course documents on Ocean Cruiser, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent "For Information Only" to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Maximum Class Size / Course Fee Code / Differential Funding Category
#2 Semester Hours/Contact Hours	#8 Methods of Instruction
#3 Catalog Description	#9 Instructional Materials
#4 Prerequisites & Corequisites	#10 Tentative Topical Outline
#6 Justification	#11 Grade Determinants
#7 Course Objectives	#12 Number of Papers and Examinations

Revised: December 1990; February 27, 1996; April 30, 1996; December 1998; May 4, 2004; Feb. 28, 2006; March 8, 2006  
 Board of Trustees Approval Date: December 11, 2006  
 Board of Trustees Approval Date: March 26, 2012  
 PLT Approval of Form: May 22, 2012

## ***EXHIBIT B-13***

OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT-173: Game Programming with OpenGL
2. SEMESTER HOURS: 3 CONTACT HOURS: (3 + 0)

Lecture Lab

3. CATALOG DESCRIPTION:

This course is a required course in the AS Computer Game Development and Design Option, and an elective in the AAS degree. This course will build on the topics learned in ~~CSIT-171: Computer Programming I~~ *a prior object oriented programming language course* to provide both theory and practice in game programming as supported by the graphical structures in the Open Graphic Library (GL). This course will provide students with a comprehensive introductory background in interactive game programming. It will explore programming options not offered in traditional programming courses, thus widening the scope of their knowledge, adding to their diversity in the programming sector; and enhancing their opportunities within the field of programming. Open lab time required.

4. PREREQUISITES: ~~CSIT-171~~ *CSIT165* or permission of instructor  
COREQUISITES: None

5. MAXIMUM CLASS SIZE: 22 COURSE FEE CODE: 3  
DIFFERENTIAL FUNDING CATEGORY: B

COURSE TYPE FOR PERKINS REPORTING:

☒ vocational (approved for Perkins funding)  
☐ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

This is a required course in Computer Science AS Degree: Game Development and Design Option and an elective in the

## EXHIBIT B - 13

Computer Science/Information Technology AAS degree.

b. Relationship to courses within the College:

- i. Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course which satisfies a general education requirement?  
 \_\_\_ yes x no

If yes, mark with an "x" the appropriate category below.

\_\_\_ Communication \_\_\_ Social Science \_\_\_  
 History \_\_\_ Humanities \_\_\_ Lab Science \_\_\_ Science  
 (Non-Lab) \_\_\_ Mathematics \_\_\_ Technology \_\_\_ Diversity  
 \_\_\_ Information Literacy \_\_\_ Ethical  
 Reasoning/Action

- ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

x Program-specific requirement for the following degree program(s):

AS in Computer Science (including program options) and AAS in Computer Science/Information Technology

\_\_\_ Elective

c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of an obsolete course which may be reactivated.]

- i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges			

## EXHIBIT B - 13

Institution	Course Title	Course Number	Number of Credits	Comm

- ii. If "None" was inserted, please explain.
- iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to De Status (Place "U" in box)
Rutgers – New Brunswick				
Georgian Court University				
Richard Stockton College				
Monmouth University				
Kean University				
Rowan University				

- iv. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four-year institution, or (b) an email from the contact person (attach to this proposal).
- v. If not transferable to any institution, explain.
- d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

This course addresses the College's vision, mission, and Academic Master Plan by



## EXHIBIT B - 13

- i. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
  - ii. Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)
  - iii. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)
  - iv. Seeking to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)
  - v. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)
- e. Mark with an "x" the General Education goal(s) addressed by this course:
- ☒ 1. Communication – Written and Oral    ☐ 6. Humanistic Perspective
  - ☐ 2. Quantitative Knowledge and Skills    ☐ 7. Historical Perspective
  - ☐ 3. Scientific Knowledge and Reasoning    ☐ 8. Global and Cultural Awareness
  - ☒ 4. Technological Competency/Info Literacy    ☐ 9. Ethical Reasoning and Action
  - ☐ 5. Society and Human Behavior    ☒ 10. Independent/Critical Thinking

## 7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

- a. Discuss the applications of computer graphics.
- b. Discuss the differences between physical and synthetic images.
- c. Utilize Application Programming Interfaces (API's) within the Open GL library.
- d. Identify the principles and tools of rasterization and apply them to applications within the graphic programming platform.
- e. Create polygons utilizing Open GL and C++ commands.
- f. Create spheres utilizing Open GL and C++ commands.
- g. Utilize RGB and Indexed color within their programming designs.
- h. Interact with the Windows System within the programming code.

## EXHIBIT B - 13

- i. Utilize aspect ratios and programming structures.
  - j. Code two and three dimensional objects.
  - k. Utilize input devices to make their objects "move".
  - l. Define and utilize display lists and array objects.
  - m. Utilize fonts within the GLUT (Graphic Library Utilities) library.
  - n. Write an event driven program.
  - o. Program geometric objects and transformations of those objects.
  - p. Utilize the matrix operations needed to create geometrical objects within their programs.
  - q. Utilize frames, N-Tuples, and the coordinate system.
  - r. Scale, rotate, and translate objects.
  - s. Create user interfaces.
  - t. Utilize perspective within their programs.
  - u. Utilize light and color to add appeal and depth to their objects.
8. METHODS OF INSTRUCTION: Class lecture/discussion, demonstrations, demonstration programs, student programming assignments.
9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions.

Class notes, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

10. TENTATIVE TOPICAL OUTLINE:

- A) Graphic Systems and Models
  - 1) Applications of Computer Graphics
  - 2) Graphic systems
  - 3) Images: Physical and Synthetic
  - 4) The Human Visual System

## EXHIBIT B - 13

- 5) The Pinhole Camera and Synthetic Camera Model
- 6) API's (Application Programmer's Interfaces)
- 7) Graphic Architecture and Rasterization
- B) Graphic Programming
  - 1) Arrays
  - 2) Programming Two Dimensional Applications and the Coordinate System
  - 3) The Open GL API
  - 4) Primitives and Attributes
  - 5) Color
  - 6) Viewing
  - 7) Control Functions
  - 8) Polygons and Recursive Programming
  - 9) Three Dimensional Programming
- C) Input and Interaction
  - 1) Input Devices
  - 2) Definition and Execution of Display Lists
  - 3) Programming Event Driven Input
  - 4) Animating and Designing Interactive Programs
- D) Geometric Objects and Transformations
  - 1) Scalars, Points, and Vectors
  - 2) Three Dimensional Primitives
  - 3) Frames and the Coordinate System
  - 4) Modeling a Colored Cube
  - 5) Scaling, Rotating, and Translating
  - 6) Transformations
  - 7) Interfaces to 3-D Applications
- E) Viewing
  - 1) Classical and Computer Viewing
  - 2) Projections
- F) Shading
  - 1) Light and Light Sources
  - 2) Color Sources
  - 3) Ambient, Diffuse, and Specular Reflection
  - 4) Polygonal Shading

**EXHIBIT B - 13**

## 5) Approximating a Sphere by Recursive Subdivision and Sphere Shading

## 11. GRADE DETERMINANTS:

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

A Excellent C Average I Incomplete  
 B+ Very Good D Below Average W Withdrawn  
 B Good F Failure R Audit  
 C+ Above Average P Passing NC No Credit

## 12. NUMBER OF PAPERS AND EXAMINATIONS:

A minimum of 3 Exams and/or major projects, and 3 minor projects.

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

In order to maintain a central file of current course documents on Ocean Cruiser, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent "For Information Only" to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Maximum Class Size / Course Fee Code / Differential Funding Category
#2 Semester Hours/Contact Hours	#8 Methods of Instruction
#3 Catalog Description	#9 Instructional Materials
#4 Prerequisites & Corequisites	#10 Tentative Topical Outline
#6 Justification	#11 Grade Determinants

## EXHIBIT B - 13

#7 Course Objectives	#12 Number of Papers and Examinations

Revised: December 1990; February 27, 1996; April 30, 1996; December 1998; May 4, 2004; Feb. 28, 200; March 8, 2006

Board of Trustees Approval Date: December 11, 2006

Board of Trustees Approval Date: March 26, 2012

PLT Approval of Form: May 22, 2012

## ***EXHIBIT B-14***

## EXHIBIT B - 14

OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT-212: Systems Analysis
2. SEMESTER HOURS: 3 CONTACT HOURS: (3 + 0)

Lecture Lab

3. CATALOG DESCRIPTION:

The focus of this course is the problem solving, communication and design skills utilized in systems analysis. Case studies are used to illustrate the system analysis, design and development activities used in the initial automation and revision of computerized applications. File and database structures are discussed and applied. In addition, documentation techniques are discussed and illustrated. The student will complete a system analysis project.

~~Working knowledge of Microsoft™ Windows required.~~

4. PREREQUISITES: ~~CSIT-160 or CSIT-171~~ *CSIT165* or  
~~Permission of the Instructor~~  
COREQUISITES: None

5. MAXIMUM CLASS SIZE: 22 COURSE FEE CODE: 3  
DIFFERENTIAL FUNDING CATEGORY: B

COURSE TYPE FOR PERKINS REPORTING:

  x   vocational (approved for Perkins funding)  
      non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

This is a program specific elective in the Computer Science/Information Technology AAS degree.

- b. Relationship to courses within the College:

- i. Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course which satisfies a general education requirement?

## EXHIBIT B - 1 4

☐ yes ☒ no

If yes, mark with an "x" the appropriate category below.

☐ Communication ☐ Social Science ☐  
 History ☐ Humanities ☐ Lab Science ☐ Science  
 (Non-Lab) ☐ Mathematics ☐ Technology ☐ Diversity  
☐ Information Literacy ☐ Ethical  
 Reasoning/Action

- ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

☒ Program-specific requirement for the following degree program(s):

AS in Computer Science (including program options) and AAS in Computer Science/Information Technology

☐ Elective

- c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of an obsolete course which may be reactivated.]

- i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comm

- ii. If "None" was inserted, please explain.  
 iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by



## EXHIBIT B - 14

OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to De Status (Place "U" in box)
Rutgers – New Brunswick				
Georgian Court University				
Richard Stockton College				
Monmouth University				
Kean University				
Rowan University				

- iv. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four-year institution, or (b) an email from the contact person (attach to this proposal).
  - v. If not transferable to any institution, explain.
- d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

This course addresses the College's vision, mission, and Academic Master Plan by

- i. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
- ii. Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)
- iii. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)
- iv. Seeking to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)
- v. Challenging students to transfer information into knowledge

## EXHIBIT B - 14

and knowledge into action. (Academic Master Plan)

- e. Mark with an "x" the General Education goal(s) addressed by this course:

☒ 1. Communication – Written and Oral    ☐ 6. Humanistic Perspective  
☐ 2. Quantitative Knowledge and Skills    ☐ 7. Historical Perspective  
☐ 3. Scientific Knowledge and Reasoning    ☐ 8. Global and Cultural Awareness  
☒ 4. Technological Competency/Info Literacy    ☐ 9. Ethical Reasoning and Action  
☐ 5. Society and Human Behavior    ☒ 10. Independent/Critical Thinking

7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

- a. Solve large problems by first reducing them to smaller more manageable components.
- b. Develop the skills necessary to perform investigations, produce design specifications, implement and document systems.
- c. Understand the interdisciplinary skills of a systems analyst.
- d. Differentiate between different file and database structures.
- e. Write program narratives, system descriptions and user manuals.
- f. Demonstrate knowledge of modern computer tools used by systems analysts.

8. METHODS OF INSTRUCTION: Class lecture, discussion, demonstrations, lab assignments, and online presentations.

9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions.

Class notes, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

10. TENTATIVE TOPICAL OUTLINE:

## EXHIBIT B - 14

- A. Part I Systems Analysis Fundamentals
  - 1. Categories of Information Systems
  - 2. New technologies integrated into traditional systems
  - 3. Systems development life cycle
  - 4. Rapid Application Development (RAD)
  - 5. Introduction to CASE tools
- B. Part II Information Requirements Analysis
  - 1. Interviewing as an important method for collecting data
    - a. Three basic ways of structuring interviews: pyramid, funnel, or diamond
    - b. Joint Application Design (JAD) can replace a series of interviews with the user community
  - 2. Prototyping and Rapid application Development
    - a. Prototyping as an information-gathering technique
    - b. Conceptions of prototypes
    - c. Guidelines for developing a prototype
    - d. Advantages and Disadvantages
    - e. Rapid application development (RAD) is an object-oriented approach to systems development
    - f. Phases of RAD
    - g. Advantages of RAD
- C. Part III The Analysis Process
  - 1. Using Data Flow Diagrams
    - a. Advantages of DFD
    - b. Correct use of DFD symbols (using Case)
    - c. Physical and Logical Modeling
  - 2. Analyzing Systems Using Data Dictionaries
    - a. Usefulness
    - b. Record, element, physical and logical concepts
    - c. Form of Documentation
    - d. Maintenance
  - 3. Describing Process Specifications and Structured Decisions
    - a. Goals of producing process specifications
    - b. Process logic

**EXHIBIT B - 14**

- c. Decision Tables and Trees
- 4. Analyzing Semi-structured Decision Support Systems
  - a. Examine decision making
  - b. Analyze student solutions to CPU case
- 5. Preparing, Writing and Presenting the Systems Proposal
  - a. Hardware/Software evaluation and cost benefit
  - b. Guidelines
  - c. Student Proposal
- D. Part IV The Essentials of Design
  - 1. Designing Effective Output
    - a. Screens, Reports, Web
  - 2. Designing Effective Input
    - a. Forms Design
  - 3. Designing Databases
    - a. Entity-Relationship diagram
    - b. Keys
    - c. Normalization
    - d. Data Mining
    - e. Web
  - 4. Designing User Interfaces
    - a. Types
    - b. Effectiveness
    - c. Help
  - 5. Designing Accurate Data-Entry Procedures
    - a. Codes and Tables
    - b. Validation Rules
- E. Part V Software Engineering and Implementation
  - 1. Quality Assurance Through Software Engineering
    - a. Total Quality Management
    - b. Structure Charts
    - c. Program and Module Design
  - 2. Successfully Implementing the Information System
    - a. Networks
    - b. Distributed Systems
    - c. Conversion

**EXHIBIT B - 14**

- d. Security and Privacy
- 3. Object-Oriented Systems Analysis and Design
  - a. Models
  - b. Types of Objects
  - c. Methods
  - d. UML

**11. GRADE DETERMINANTS:**

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

A Excellent C Average I Incomplete  
 B+ Very Good D Below Average W Withdrawn  
 B Good F Failure R Audit  
 C+ Above Average P Passing NC No Credit

**12. NUMBER OF PAPERS AND EXAMINATIONS:**

A minimum of 5 assignments and/or labs, a minimum of 1 major design project and a minimum of 2 exams.

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

In order to maintain a central file of current course documents on Ocean Cruiser, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

<b>Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.</b>	<b>Revisions to the following items must be sent "For Information Only" to the Curriculum Committee, College Senate, and Board of Trustees.</b>

## EXHIBIT B - 14

#1 Course Number & Title	#5 Maximum Class Size / Course Fee Code / Differential Funding Category
#2 Semester Hours/Contact Hours	#8 Methods of Instruction
#3 Catalog Description	#9 Instructional Materials
#4 Prerequisites & Corequisites	#10 Tentative Topical Outline
#6 Justification	#11 Grade Determinants
#7 Course Objectives	#12 Number of Papers and Examinations

Revised: December 1990; February 27, 1996; April 30, 1996; December 1998; May 4, 2004; Feb. 28, 2006; March 8, 2006

Board of Trustees Approval Date: December 11, 2006

Board of Trustees Approval Date: March 26, 2012

PLT Approval of Form: May 22, 2012

## ***EXHIBIT B-15***

## EXHIBIT B - 15

OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT-213: Database Management
2. SEMESTER HOURS: 3 CONTACT HOURS: (3 + 0)

Lecture Lab

3. CATALOG DESCRIPTION:

A course emphasizing the concepts and structure necessary to design and implement database management systems. Hierarchical, network and relational models will be evaluated. The student will design and implement a project using a modern relational database package, report generator and SQL. Open lab time required. ~~Fall semester evening sections only.~~

4. PREREQUISITES: ~~CSIT-160 or CSIT-171~~ **CSIT165**  
COREQUISITES: None

5. MAXIMUM CLASS SIZE: 22 COURSE FEE CODE: 3  
DIFFERENTIAL FUNDING CATEGORY: B

COURSE TYPE FOR PERKINS REPORTING:

☒ vocational (approved for Perkins funding)  
☐ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

This is a required course in Computer Science AS degree Information Technology, Information Systems and Game Development and Design options and Computer Science/Information Technology AAS degree.

- b. Relationship to courses within the College:
  - i. Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course which satisfies a general education requirement?  
☐ yes ☒ no



## EXHIBIT B - 15

If yes, mark with an "x" the appropriate category below.

History ☐ Communication ☐ Social Science ☐  
☐ Humanities ☐ Lab Science ☐ Science  
 (Non-Lab)  
☐ Mathematics ☐ Technology ☐ Diversity  
☐ Information Literacy ☐ Ethical  
 Reasoning/Action

- ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

☒ Program-specific requirement for the following degree program(s):

AS in Computer Science (including program options) and AAS in Computer Science/Information Technology

☐ Elective

- c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of an obsolete course which may be reactivated.]

- i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comtr

- ii. If "None" was inserted, please explain.

## EXHIBIT B - 15

- iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rutgers – New Brunswick				
Georgian Court University				
Richard Stockton College				
Monmouth University				
Kean University				
Rowan University				

- iv. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four-year institution, or (b) an email from the contact person (attach to this proposal).
- v. If not transferable to any institution, explain.
- d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

This course addresses the College's vision, mission, and Academic Master Plan by

- i. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
- ii. Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)
- iii. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)
- iv. Seeking to empower students through the mastery of

## EXHIBIT B - 15

intellectual and Practical Skills. (Academic Master Plan)

v. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)

e. Mark with an "x" the General Education goal(s) addressed by this course:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> 1. Communication – Written and Oral       | <input type="checkbox"/> 6. Humanistic Perspective                    |
| <input type="checkbox"/> 2. Quantitative Knowledge and Skills                 | <input type="checkbox"/> 7. Historical Perspective                    |
| <input type="checkbox"/> 3. Scientific Knowledge and Reasoning                | <input type="checkbox"/> 8. Global and Cultural Awareness             |
| <input checked="" type="checkbox"/> 4. Technological Competency/Info Literacy | <input type="checkbox"/> 9. Ethical Reasoning and Action              |
| <input type="checkbox"/> 5. Society and Human Behavior                        | <input checked="" type="checkbox"/> 10. Independent/Critical Thinking |

#### 7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

- a. Describe the characteristics of business databases and the features of database management systems.
- b. Understand the importance of nonprocedural access for software productivity.
- c. Appreciate the advances in database technology and the contribution of database technology to modern society.
- d. Perceive career opportunities related to database application development and database administration.
- e. Recognize relational database terminology.
- f. Understand the meaning of the integrity rules for relational databases.
- g. Understand the impact of referenced rows on maintaining relational databases.
- h. Understand the meaning of each relational algebra operator.
- i. List tables that must be combined to obtain desired results for simple retrieval requests.
- j. Develop SQL queries to retrieve information from relational databases.
- k. Write SQL SELECT statements for queries involving restriction, projection, join, and summarization operators.
- l. Understand the meaning of grouping queries using the

## EXHIBIT B - 15

conceptual evaluation process.

- m. Write English descriptions to document SQL statements.
  - n. Write INSERT, UPDATE, and DELETE statements to change the contents of a database.
  - o. List goals of database development.
  - p. Describe the roles of databases in an information system.
  - q. List functions typically provided by CASE tools for database development.
  - r. Know the symbols and vocabulary of the Crow's Foot notation for entity relationship diagrams.
  - s. Use the cardinality symbols to represent 1-1, 1-M, and M-N relationships.
  - t. Use generalization hierarchies to represent similar entity types.
  - u. Detect notational errors in an entity relationship diagram.
  - v. Convert an ERD to a table design using conversion rules.
  - w. Identify modification anomalies in tables with excessive redundancies.
  - x. Define functional dependencies among columns of a table.
  - y. Apply normalization techniques to entities and tables.
  - z. Understand the need for normalization and determine the correct form based on application requirements.
  - aa. Appreciate the usefulness and limitations of normalization.
8. METHODS OF INSTRUCTION: Class lecture, discussion, demonstrations, lab assignments, and online presentations.
9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)
- Appropriate textbooks will be selected. Contact the department for current adoptions.
- Class notes, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.
10. TENTATIVE TOPICAL OUTLINE:

## EXHIBIT B - 15

- A) Database Characteristics
  - 1) Features of Database Management systems
  - 2) Development of Data base Technology and Market Structure
  - 3) Architectures of Database Management systems
  - 4) Organizational Impacts of Database Technology
- B) The Relational Data Model
  - 1) Basic Elements
    - a) Tables
    - b) Connections among Tables
    - c) Alternative Terminology
  - 2) Integrity Rules
    - a) Definition of Integrity Rules
    - b) Applying integrity Rules
    - c) Graphical Representation of Referential Integrity
  - 3) Delete and Update Actions impact on integrity
  - 4) Relational Algebra
    - a) Restrict and Project
    - b) Extended cross product
    - c) Join operator
    - d) Outer join Operator
    - e) Union, Intersection, and Difference Operators
    - f) Divide Operator
- C) SQL
  - 1) History and scope of SQL
  - 2) Select
    - a) Single table problems
    - b) Joining tables
    - c) Summarizing with GROUP BY and HAVING
    - d) Improving the appearance of results
  - 3) Evaluation of the Select
  - 4) Refining query formulations
    - a) Joining multiple tables cross product style
    - b) Joining multiple tables join operator style

## EXHIBIT B - 15

- c) Self-joins and multiple joins
- d) Combining joins and groupings
- e) Traditional set operators in QLS
- 5) SQL Modification Statements
- D) Goals of Database Development
  - 1) Information Systems
    - a) Components
    - b) Development process
  - 2) Goals of Database Development
    - a) Common vocabulary
    - b) The meaning of Data
    - c) Data Quality
    - d) Efficient Implementation
  - 3) Database Development Process
    - a) Phases of Development
    - b) Skills in Database Development
  - 4) Tools of Database Development
    - a) Diagramming
    - b) Documentation
    - c) Analysis
    - d) Prototyping tools
    - e) CASE Tools
  - 5) Entity Relationship diagrams
    - a) Introduction to ER Diagrams
    - b) Basic Symbols
    - c) Relationship Cardinality
  - 6) Relationships
    - a) Identification Dependency(Weak Entities)
    - b) Relationship patterns
    - c) Equivalence between 1-M and M-N Relationships
  - 7) Classification of the ER Model
    - a) Generalization Hierarchies
    - b) Disjointness and Completeness Constraints
    - c) Multiple Levels of Generalization
- E) Normalization

**EXHIBIT B - 15**

- 1) Overview of Relational Database Design
  - a) Avoidance of Modification Anomalies
  - b) Functional Dependencies
- 2) Normal Forms
  - a) First normal form
  - b) Second and third normal form
  - c) Boyce-Codd Normal Form
- 3) M-Way Relationships
  - a) Relationship independence
  - b) Multi-valued Dependencies and Fourth normal form
- 4) Higher Level Normal Forms
  - a) Fifth normal form
  - b) Domain key normal form
- 5) Role of Normalization in the development process
- F) Application Development with Views
  - 1) Background
    - a) Motivation
    - b) View definition
  - 2) Using views for retrieval
    - a) Using views in SELECT Statements
    - b) Processing queries with view references
  - 3) Updating using views
    - a) Single table updatable views
    - b) Multiple table updatable views.

**11. GRADE DETERMINANTS:**

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

A Excellent C Average I Incomplete  
 B+ Very Good D Below Average W Withdrawn  
 B Good F Failure R Audit  
 C+ Above Average P Passing NC No Credit

**12. NUMBER OF PAPERS AND EXAMINATIONS:**

**EXHIBIT B - 15**

A minimum of 5 assignments demonstrating understanding of database concepts and a minimum of 4 major works consisting of projects and/or tests.

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

In order to maintain a central file of current course documents on Ocean Cruiser, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

<b>Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.</b>	<b>Revisions to the following items must be sent "For Information Only" to the Curriculum Committee, College Senate, and Board of Trustees.</b>
#1 Course Number & Title	#5 Maximum Class Size / Course Fee Code / Differential Funding Category
#2 Semester Hours/Contact Hours	#8 Methods of Instruction
#3 Catalog Description	#9 Instructional Materials
#4 Prerequisites & Corequisites	#10 Tentative Topical Outline
#6 Justification	#11 Grade Determinants
#7 Course Objectives	#12 Number of Papers and Examinations

Revised: December 1990; February 27, 1996; April 30, 1996; December 1998; May 4, 2004; Feb. 28, 2006; March 8, 2006  
 Board of Trustees Approval Date: December 11, 2006  
 Board of Trustees Approval Date: March 26, 2012  
 PLT Approval of Form: May 22, 2012



## ***EXHIBIT B-16***

EXHIBIT B - 16

OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF LANGUAGE AND THE ARTS

1. COURSE NUMBER AND TITLE: ~~PHH~~ **RELG** 193: World Religions
2. SEMESTER HOURS: 3 CONTACT HOURS: (3 + 0)  
Lecture Lab

3. CATALOG DESCRIPTION

The course examines the historical, *geographical and cultural evolution of the* ,fundamental doctrines, beliefs, *rituals, symbols*, and practices of religious traditions. The course has an emphasis on some essential differences and similarities which exist among religious traditions. The major religions covered are tribal/oral traditions, Hinduism, Buddhism, Confucianism, Taoism, *Shinto*, Judaism, Christianity, and Islam, *new religions, and religion in the 21<sup>st</sup> century*.

4. PREREQUISITES: None COREQUISITES: None
5. MAXIMUM CLASS SIZE: 35 COURSE FEE CODE: 0  
DIFFERENTIAL FUNDING CATEGORY: A

COURSE TYPE FOR PERKINS REPORTING:

☐ vocational (approved for Perkins funding)  
☒ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

The study of religion, as reflected in the following quotation, is central to the development and understanding of human civilizations. "Who are . . . the greatest benefactors of the living generation of mankind?" asks Toynbee. "I should say: 'Confucius and Laotze, the Buddha, the Prophets of Israel and Judah, Zoroaster, Jesus, Mohammed and Socrates.'"

Current global events suggest that students would be interested in

## EXHIBIT B - 16

taking a course that would further their knowledge and understanding of the diverse religions of the world.

The intrinsic value of studying diverse religious belief in an increasingly global community demonstrates a need for this course.

Continued and increasing enrollments at other institutions of higher education in courses in world religions.

- b. Relationship to courses within the College
- i. Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course which satisfies a general education requirement? ☒ yes ☐ no  
If yes, mark with an "x" the appropriate category below.

☐ Communication ☐ Social Science ☐ History  
☒ Humanities ☐ Lab Science ☐ Science (Non-Lab)  
☐ Mathematics ☐ Technology ☒ Diversity  
☐ Information Literacy ☒ *Ethical Reasoning/Action*

- ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

☐ Program-specific requirement for the following degree program(s):

☐ Elective

- c. Related courses in other institutions:

- i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comm
Atlantic Cape May	World Religions	RELG 110	3	

## EXHIBIT B - 16

Bergen Community College	Religions of the World	PHR 121	3	
Cumberland County College	World Religions	RL 102	3	
Gloucester County College	Religions of the World	PHI 110	3	
Mercer County Community College	Living World Religions	REL 102	3	
Raritan Valley Community College	Major World Religions	PHIL 105	3	
Hudson County College	Asian Religions	PHIL 102	3	
Hudson County College	Religions of the West	PHIL 103	3	
Middlesex County College	History of Major World Religions	HIS 245	3	
Salem Community College	Comparative Religions	PHIL 222	3	
Sussex County College	Comparative Religions	PHIL 201	3	

- ii. If "None" was inserted, please explain.
- iii. Complete the table below. The four-year institutions listed below comprise the top six institutions queried on NJTransfer by OCC Students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "x" in box)
Rutgers – New Brunswick	01840 (RELIGION)	Free Electives, Humanities Area 2		
Georgian Court University	RS140 (RELIGIONS IN AMERICA)	General Education		
Richard Stockton College	PHIL 2400 Comparative Religions	Humanities, International / Multicultural Course		
Monmouth University	CC001 RS101 Living	Cross Cultural Course		

## EXHIBIT B - 16

	Religions of the World			
Kean University	REL 1700, Introduction to Religion	Humanities		
Rowan University	1510200 Religions of the World	General Education Course, History, Humanities and Language, Multicultural/Global		

- iv. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four-year institution, or (b) an email from the contact person (attach to this proposal).
  - v. If not transferable to any institution, explain.
- d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College
- 1) This course will transfer to nearly all New Jersey higher education institutions and so meets the College's vision to have students take courses that transfer well. In addition, this course introduces students to the culturally diverse religious traditions which will help them to communicate in an increasingly global community and assist students to become life long learners.
  - 2) This course is consistent with the College's "Academic Master Plan" because, students may develop a more sophisticated way of interpreting the events of the world by development of an understanding of different religious belief systems; thereby leading to the development of independent learners through writing-intensive and critically self-reflective course content. By having students investigate the diverse religious practices, doctrines and beliefs within the world, they may begin to understand the complex relationship of human experiences from the past and the present and explore how those connections may affect future perspectives.
  - 3) This course is consistent with the strategic initiatives of the College because it draws upon the talents of existing faculty who can teach courses in religion. The course also will help to prepare

## EXHIBIT B - 16

students to thrive in a complex and challenging global community. This course does this by introducing students to a global perspective of all of the world's major religious traditions.

- e. Mark with an "x" the General Education goal(s) addressed by this course:

☒ 1. Communication – Written and Oral    ☐ 6. Humanistic Perspective  
☐ 2. Quantitative Knowledge and Skills    ☒ 7. Historical Perspective  
☐ 3. Scientific Knowledge and Reasoning    ☒ 8. Global and Cultural Awareness  
☐ 4. Technological Competency/Info Literacy    ☒ 9. **Ethical Reasoning and Action**  
☐ 5. Society and Human Behavior    ☒ 10. Independent/Critical Thinking

## 7. SPECIFIC COURSE LEARNING OBJECTIVES

Students who successfully complete this course will be able to:

- a. ~~Demonstrate knowledge of~~ *Describe* the historical, *geographical*, cultural, and philosophical foundations of the world religions.
- b. ~~Recognize that ones world view is one view among many others and that each religious tradition is to be appreciated for its special uniqueness and individuality.~~ *Identify different religious doctrines, mythologies, rituals, and symbols that express the special uniqueness and individuality of different religious traditions and compare/contrast the world views expressed by those traditions.*
- c. ~~Demonstrate an understanding of his/her own~~ *Identify their own* unique cultural traditions and religious world views ~~as well as realize~~ *and describe* the common threads of our shared humanity and religiosity, transcending our cultural and religious differences.
- d. ~~Develop~~ *Demonstrate* an appreciation and understanding of the diversity of religious traditions as a first step to facilitating the ability to effectively communicate, cooperate and collaborate with those who are different from ourselves.

## EXHIBIT B - 16

- e. ~~Develop the ability to think both empathetically and critically~~  
*Demonstrate empathetic and critical thinking* about conflicting religious claims.
- f. *Analyze the ethical implications of a religious belief, issue or situation.*

## 8. METHODS OF INSTRUCTION

Formal lecture and class discussion. Lectures will be brief and introduce the key ideas of the religion covered. Discussion should be directed to facilitating student comprehension and empathy of the diversity of religious doctrines, rituals, and practices of the major world religions.

## 9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Text: An appropriate textbook will be selected. Please contact the department office for current adoptions.

Technology: Internet Access for Web Enhanced Course Materials

Human Resources Needs: Presently Employed Faculty can teach this course.

## 10. TENTATIVE TOPICAL OUTLINE

- I. Introduction
- II. Religions of Tribes and City-States
  - A. Religions of the Americas.
  - B. Religions of Africa,
- III. Religions Arising In India.
  - A. Hinduism.
  - B. Buddhism.
  - C. Jainism and Sikhism.
- IV. Religions of China and Japan.
  - A. China.
  - B. Japan.
- V. Religions that Influenced East and West.
  - ♦ Ancient Religions of Iraq and Iran.
- VI. Religions of the Family of Abraham.

**EXHIBIT B - 16**

- A. Judaism.
  - B. Christianity.
  - C. Islam.
- VI. Conclusions

**11. GRADE DETERMINANTS**

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

A Excellent C Average I Incomplete  
 B+ Very Good D Below Average W Withdrawn  
 B Good F Failure R Audit  
 C+ Above Average P Passing NC No Credit

**12. NUMBER OF PAPERS AND EXAMINATIONS**

Regular quizzes (about 12)  
 Mid-term and Final Exam  
 One Major Research Paper

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

In order to maintain a central file of current course documents on Ocean Cruiser, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

<b>Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.</b>	<b>Revisions to the following items must be sent "For Information Only" to the Curriculum Committee, College Senate, and Board of Trustees.</b>
<b>#1 Course Number &amp; Title</b>	<b>#5 Maximum Class Size / Course Fee Code /</b>



## EXHIBIT B - 16

	Differential Funding Category
#2 Semester Hours/Contact Hours	#8 Methods of Instruction
#3 Catalog Description	#9 Instructional Materials
#4 Prerequisites & Corequisites	#10 Tentative Topical Outline
#6 Justification	#11 Grade Determinants
#7 Course Objectives	#12 Number of Papers and Examinations

Developed by Dr. Katherine Tietge March 2006  
 Board of Trustees Approval Date: May 22, 2006  
 Board of Trustees Approval Date: September 22, 2008  
 Board of Trustees Approval Date: September 27, 2010  
 Board of Trustees Approval Date: March 26, 2012  
 PLT Approval of Form: May 22, 2012

## ***EXHIBIT B-17***

**POLICY**

1. To qualify as a candidate for the degree of Associate in Arts, Associate in Science, or Associate in Applied Science, a student must have the following:
  - a. A minimum of 64 hours of non-remedial credit which must include all courses required in the curriculum elected by the student.

Minimum requirements as indicated below:

**Associate in Arts Degree**

- |        |  |
|--------|--|
| 9 cr.  | Communication  |
| 6 cr.  | History  |
| 9 cr.  | Humanities   |
| 3 cr.  | Diversity [May count as another general education requirement]   |
| 6 cr.  | Social Science   |
| 12 cr. | Mathematics (3-8 cr.) / Science (3-8 cr.) / Technology (0-4 cr.) |

Students must select at least one math course, one lab science course, and one technology course and must complete the 12 cr. requirement with any math, science, or technology course from the current List of Approved General Education Courses, which resides in the Office of Academic Affairs. Students may attempt to "test out" of the technology requirement. If they succeed, they must take additional credits in math, science, or technology from the List of Approved General Education Courses.

~~2-3 cr. OCC Requirement: Any course from the List of Approved General Education Courses, ACAD 155: Student Success, or any HEHP course.~~

~~16-17 cr. 19 cr.~~

**Elective Courses**

**64 cr.**

**TOTAL CREDITS (45 General Education Credits)**

**Associate in Science Degree**

- |       |  |
|-------|--|
| 6 cr. | Communication  |
| 3 cr. | Humanities   |
| 3 cr. | Social Science   |
| 3 cr. | Additional Humanities or Social Science                          |
| 9 cr. | Mathematics (3-8 cr.) / Science (3-8 cr.) / Technology (0-4 cr.) |

Students must select one math course, one lab science course, and one technology course from the current List of Approved General Education Courses, which resides in the Office of Academic Affairs. Students may attempt to "test out" of the technology requirement. If they succeed, they must take additional credits in math, science, or technology from the List of Approved General Education Courses.

**6 cr.**

**Additional General Education Credit [from the categories above]**

~~2-3 cr.~~

~~OCC Requirement: Any course from the List of Approved General Education Courses, ACAD 155: Student Success, or any HEHP course.~~

18 cr.	Department Concentration / Program Specific Requirements
<del>13-14 cr.</del> 16 cr.	Elective Courses
64 cr.	TOTAL CREDITS (30 General Education Credits)

Associate in Applied Science Degree

6 cr.	Communication
3 cr.	Humanities or Social Science
3 cr.	Mathematics – Science – Technology
	Students must select any math, science, or technology course from the current List of Approved General Education Courses, which resides in the Office of Academic Affairs.

8 cr.	Additional General Education Credit [from the categories above]
<del>2-3 cr.</del>	<del>OCC Requirement: Any course from the List of Approved General Education Courses, ACAD 155: Student Success, or any HEHP course.</del>
<u>41-42 cr.</u>	Program-Specific Requirements
3 cr.	Elective Courses
64 cr.	TOTAL CREDITS (20 General Education Credits)

- c. Waiver of courses requires that an equivalent number of credits must be completed to meet graduation requirements.
2. To qualify as a candidate for an Associate degree, a student must have earned at least 64 semester hours of non-remedial credit, or as specified otherwise for certain curricula, and accrued sufficient grade points for a cumulative grade point average of 2.00 (average grade of "C").
3. a. As long as the maximum allowable of 32 transfer credit hours is not exceeded, a student who has matriculated at another accredited institution may transfer back to Ocean County College a maximum of 9 credit hours for the purpose of completing his/her degree requirements. Under circumstances totally beyond the control of the student concerned, the maximum allowable may be exceeded by petitioning the Academic Standards Committee which could approve up to 24 credit hours to be transferred back to meet degree requirements.
- b. Service personnel on active duty and their dependents must meet all College degree requirements with the following exceptions:
  - (1) A minimum of 24 semester hours of the 64 required must be earned through attendance of classes at Ocean County College.
  - (2) These 24 semester hours may be earned at any time during the student's candidacy for a degree.

4. The College will confer Associates degrees three times per year. Candidates for graduation must file an application for Graduation by an established deadline to be eligible for the next upcoming graduation. The specific deadlines and the actual dates of graduation will be determined by the Registrar, within the following guidelines:
  - After the Fall Semester
    - deadline to apply: mid November
    - actual graduation: second week of January
  - After the Spring Semester
    - deadline to apply: mid March
    - actual graduation: day of Commencement Ceremony
  - After the Summer Sessions
    - deadline to apply: mid July
    - actual graduation day: last business day of August
5. A candidate whose final cumulative grade point average is 3.50 or higher will be graduated with honors based on the following:
  - 3.50 - 3.79 cum laude (with honors)
  - 3.80 - 3.89 magna cum laude (with high honors)
  - 3.90 - 4.00 summa cum laude (with highest honors)

A student graduating with honors will receive an emblem on the diploma, indicating the honors category. The appropriate honors distinction shall also be shown on the student's official College transcript.
6. All specific courses required for a second degree must be completed without repeating any previous courses in which credit was earned. Neither will any courses judged to be at a lower academic level than those previously completed be used toward the second degree.
7. No less than 18 additional credit hours, including those required, must be earned beyond the number established for the initial degree.
8. The prescribed procedure will be followed in filing an application for a second degree.
9. Additional degrees beyond the second normally will not be granted. Exceptions must be approved by the Academic Standards Committee.

ADOPTED: August 26, 1968  
Revised: December 21, 1970  
Revised: January 24, 1972  
Revised: December 18, 1972  
Revised: March 26, 1973  
Revised: June 25, 1973  
Revised: February 25, 1974  
Revised: June 24, 1974  
Revised: December 18, 1976  
Revised: June 27, 1977  
Revised: September 17, 1979  
Revised: January 26, 1981  
Revised: January 28, 1991  
Revised: March 22, 1993  
Revised: August 25, 2008  
Revised: August 24, 2009  
Revised: April 26, 2010